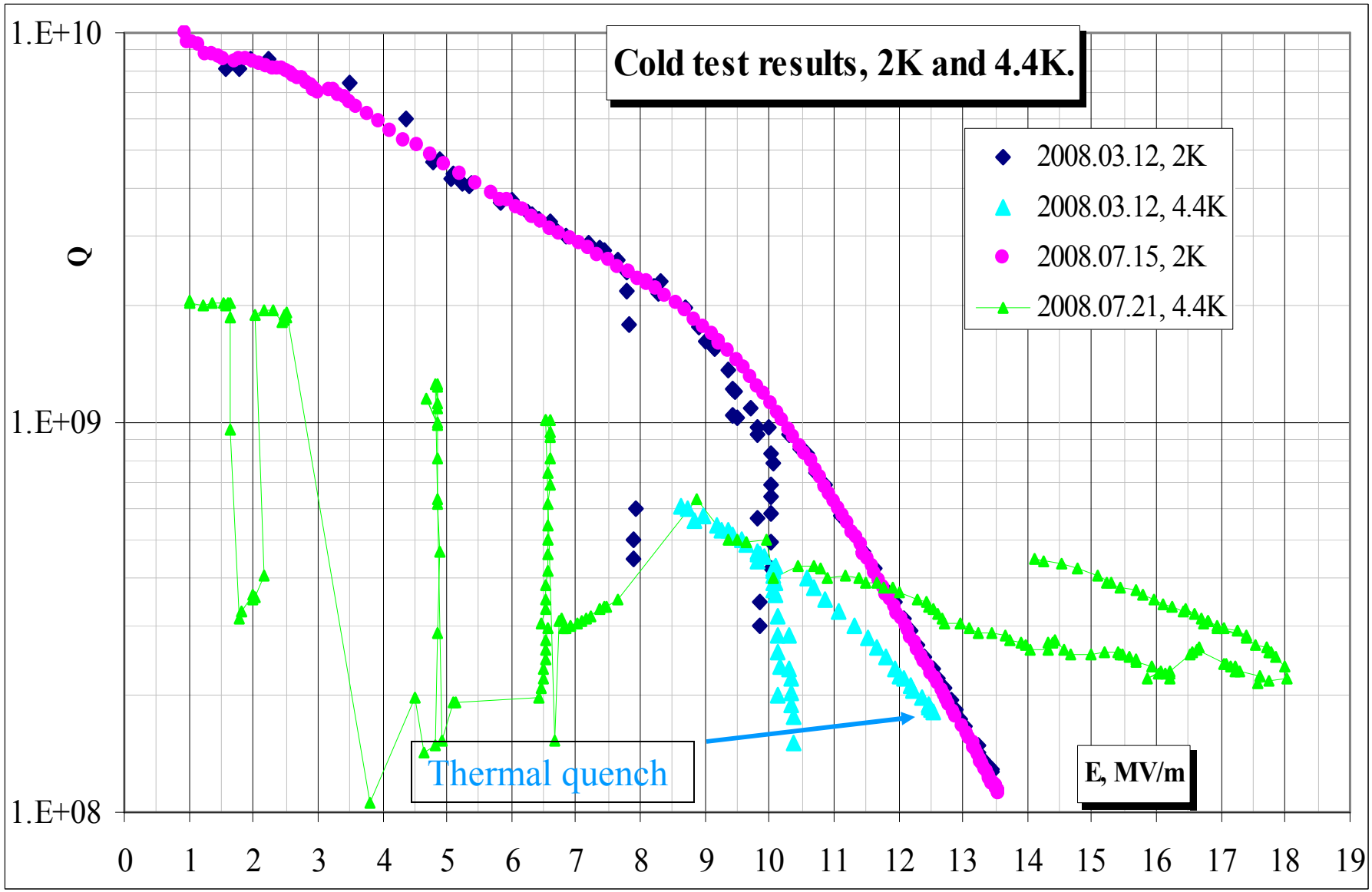
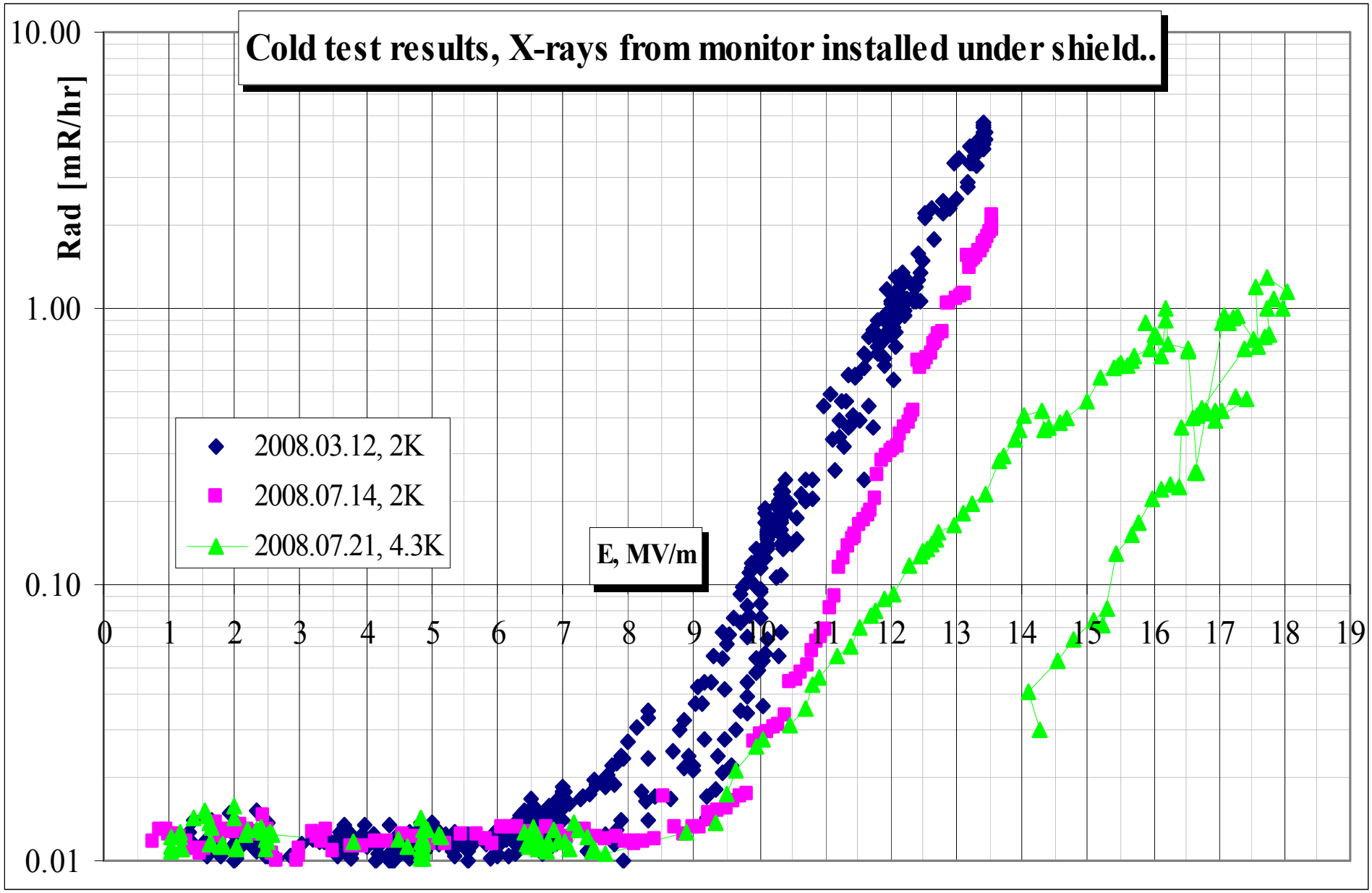
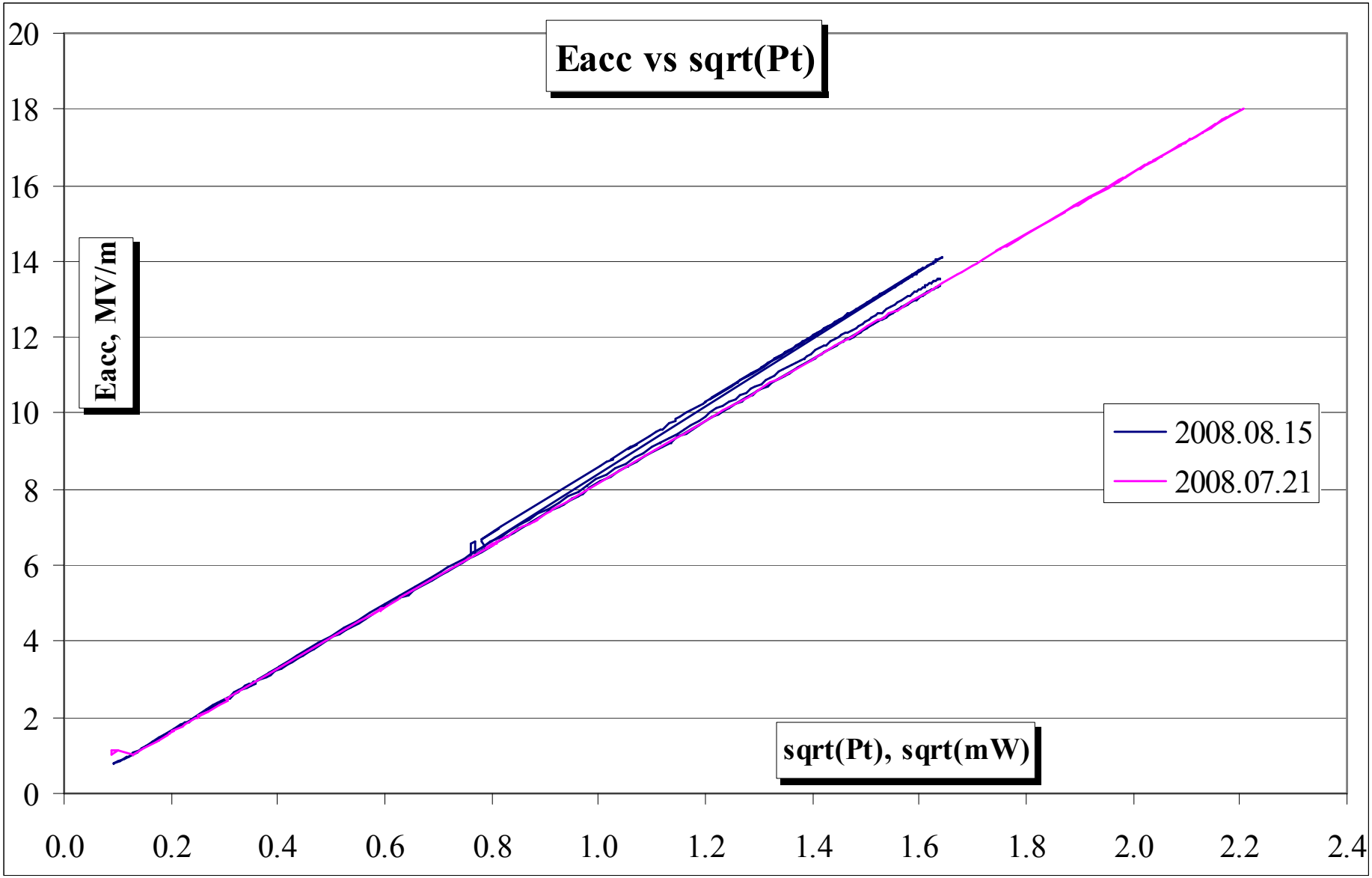


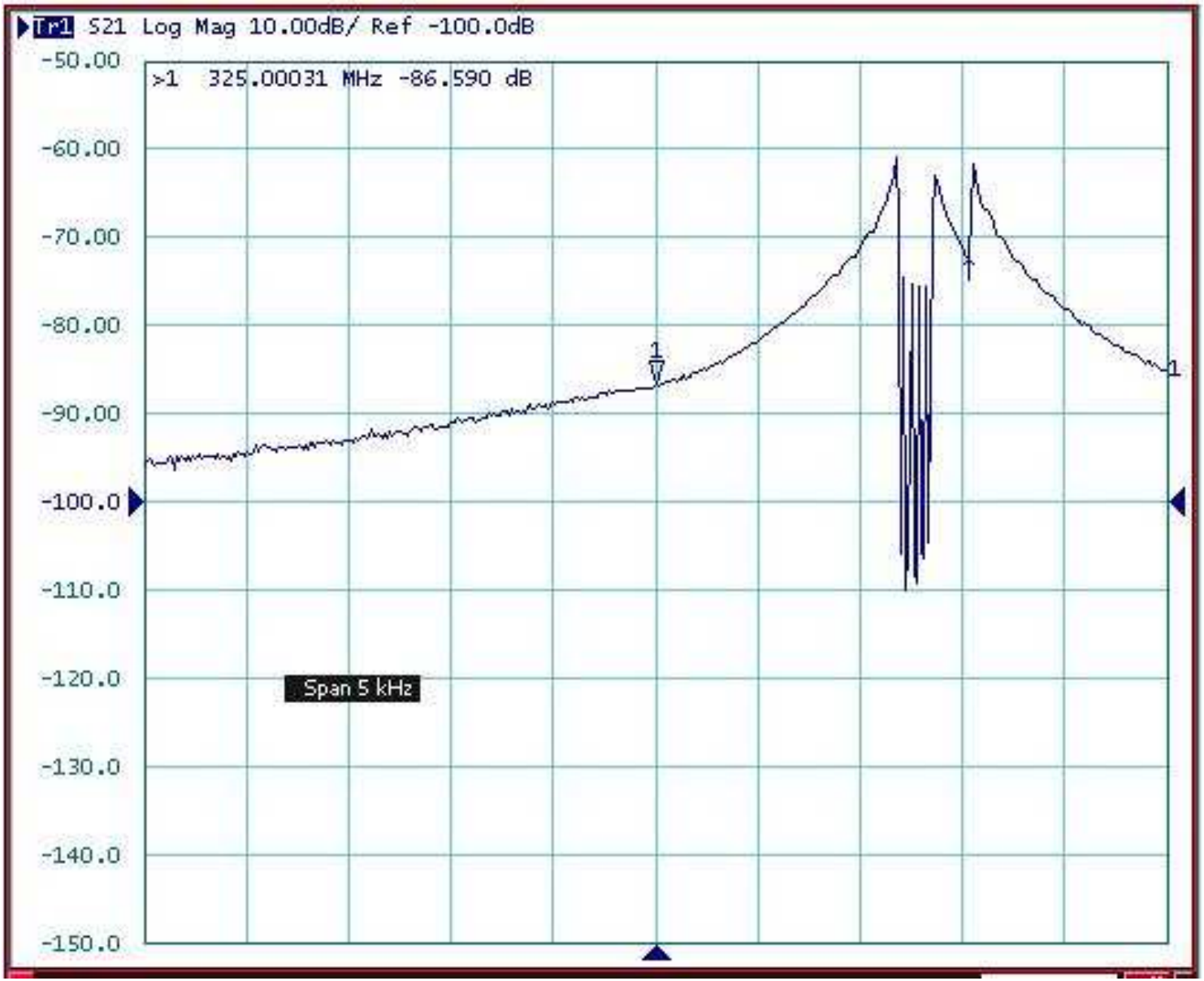
2008.07.21. Maximum of accelerating gradient reached not limited by amplifier power and field emission. Test ended due to "multipacting/breakdown" in the cavity caused by pure vacuum.



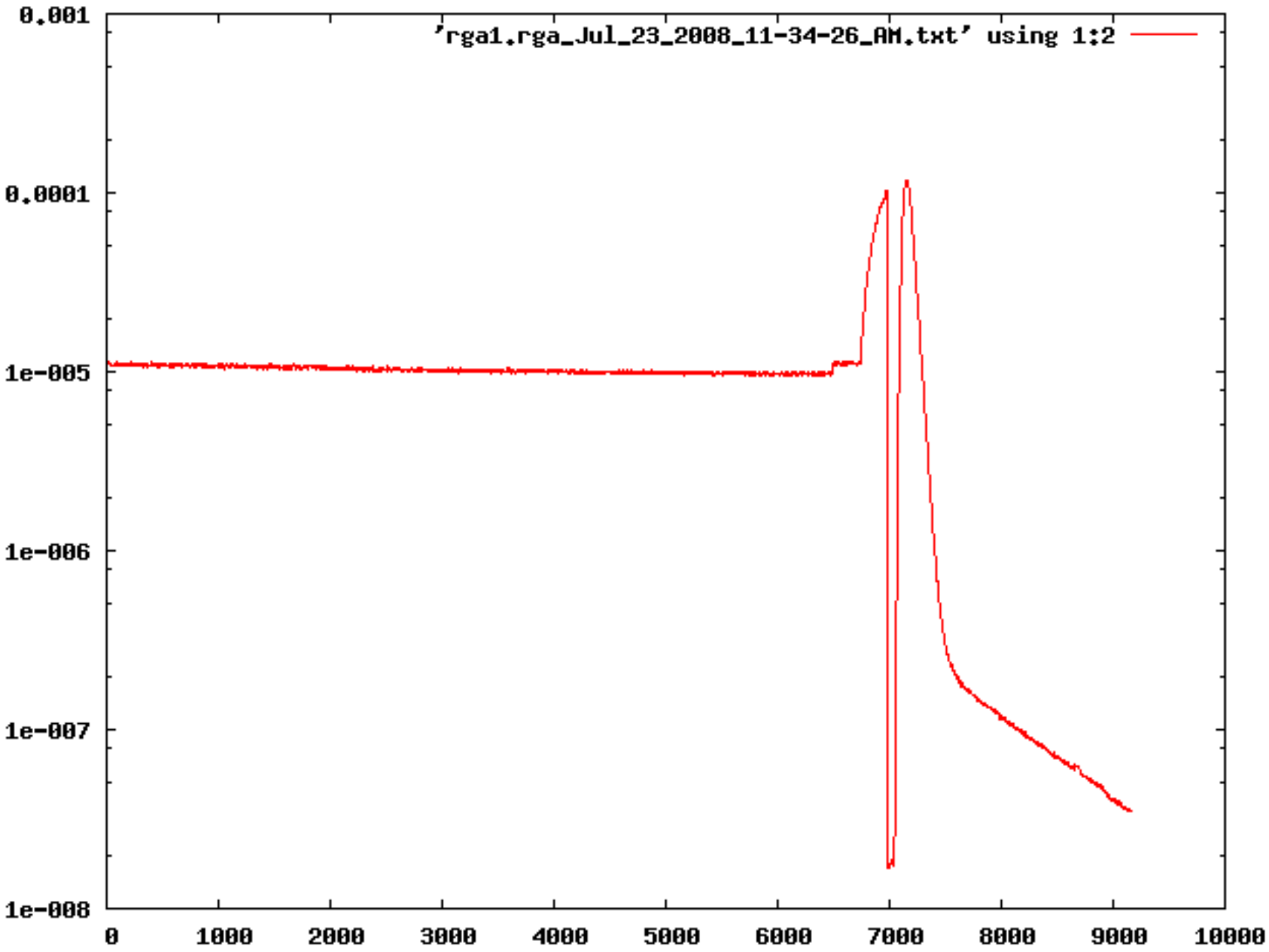
July 14th cold test x-rays lower twice compared with March 12th test. In the July 21th test x-rays 100 times lower after processing.



Eacc vs field probe signal. These curves prove that cable calibrations are correct.



Network Analyser measurements also shows “breakdown” in the cavity. Input power only 10 mW.



From Dmitri. Room T helium leak history.

3rd test history of the cavity SSR1-1 on July 14-17 and 21, 2008.

July 14. Vacuum vessel cooling down started.

July 15. RF test started. Cavity power processed a little at 4K and then cooled down to 2K. Power processing finished at 2K. Results very similar to results of March test.

July 16. “Multipacting/breakdown” in the cavity. About 5 hours in this regime, about 20-50 kV/m

July 17 cavity warmed up.

July 21 cavity cooled to 4.4K and tested. After about 3 hours processing cavity reached 18MV/m. Limited by “Multipacting/breakdown” due to bad vacuum in the cavity, may be caused by leak.